U. S. CIRCUIT COURT OF APPEALS FOR THE

SEVENTH CIRCUIT October Term, 1904 No. 1154 National Phonograph Co., Appellant versus

Lambert Company, Appellee.

1. Reply to Appellee's Arguments.

2. On the opinions of the Court below.

3. Authorities on issues raised by Appellee.

DECISION OF THE CIRCUIT COURT, April 1905

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GEO. HORNSTEIN CO., PRINTERS, CHICAGO

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## REPLY TO APPELLEE'S ARGUMENTS.

In the brief time allowed for a reply to appellee's arguments, it is not practicable to do more than refer to the salient points, particularly such as are not fully covered by the appellant's main brief, including some matters not emphasized at the argument which appear in appellee's brief.

ABANDONMENT UNDER THE STATUTE BY TWO YEARS' PUBLIC USE PRIOR TO THE FILING OF EDISON'S APPLICATION.

At the argument the point was made by appellee's counsel that the present case comes within the rule announced by the Supreme Court in Smith and Griggs Mfg. Co. v. Sprague, namely, that where it is clearly shown that there was a public use of an invention by the inventor for more than two years prior to the application, the burden rests on him to establish by convincing proof that the use was for the purpose of perfecting an incomplete invention by tests and experiments.

We assert that the present case does not come within that rule, because it lacks the element of a clear showing of public use more than two years prior to the application, which is the essential condition of the rule. The only use made of the invention prior to 1897, when Edison began to practice the process commercially, was the use made by Edison and his assisting experimentalists in Edison's laboratory for the purpose of perfecting the process.

The argument was also made, based upon Eastman v. Mayor (134 Fed., 844), that the nine years occupied by Edison in his experimental work was one of unreasonable length-indicating that the excuse that that period was devoted to experimental work is not a bona fide one. If not for the purpose of experiment what use was made of the time? Edison made no profit out of the work during this interval. He spent twenty-nine thousand dollars and employed at least one man continuously on the work. Do continuous work and continuous expenditure of this character indicate an intention to abandon the invention? When the complicated character of the process is considered and the delicacy of the various operations understood, the time required to perfect the process does not appear unreasonable. It is probably true that Edison might, by expending one hundred thousand dollars on the work and the employment of a number of men, have perfected the invention within a shorter time. But as he himself says, there was at the time little or no demand from the public for the phonograph and its adjuncts. He had faith that that demand would eventually arise and he expected by the course he was pursuing to have the process perfected in time to meet that demand. The result shows that his judgment was sound. Surely, under these circumstances, an inventor is not required to do more than keep one man continuously employed upon perfecting an invention, or spend more than three thousand dollars a year for that purpose. And it should be remembered that, even though Edison took nine years to perfect the invention, he reached the goal before anybody else, and consequently no question of intervening rights arises.

#### VALIDITY OF EDISON'S PATENT.

It is asserted that Edison's patent is invalid in view of the patents of Lioret and Young. These patents are fully treated in the complainant's main brief (p. 48, et seq.). That they describe inoperative and useless suggestions is not only proved in this case, but was also asserted by the appellee's predecessor during the prosecution of the Lambert application, which was in interference with Edison. Further than this, both Edison and Lambert, while in the Patent Office, amended their claims so as to distinguish in terms over the Lioret and Young disclosures, and one of these claims was made the subject of the interference between Edison and Lambert, which was decided in Edison's favor. While the defense of invalidity based upon these patents is open to the appellee here, it comes with poor grace from the appellee to assert that the invention, which it convinced the Patent Office was patentable, and upon which it contested an interference, is in fact not patentable because of the same prior matters which were referred to by the Patent Office. Judge Platt, in the opinion which is printed at the end of appellee's brief, finds with regard to the Lioret and Young patents that they involved, respectively, the features of "unscrewing" and "collapsing" which both Edison and Lambert asserted in the Patent Office they involved, and which features were made the basis for the distinctions over those patents. The fact that the Lioret United States patent contains a claim couched in general terms would seem to be an immaterial consideration.

#### INFRINGEMENT.

Appellee's argument upon the question of infringement is of a two-fold character. Appellee asserts that it does not employ a blank "sufficiently thick," etc., which is specified in some, but not all, of the claims in issue, and that the process which it employs is in general a substantially different process from that described and claimed in the Edison patent.

Regarding the first element of this argument, it is explained in our main brief (p. 73) that the expression "sufficiently thick," etc., was intended to distinguish a self-sustaining blank thick enough to receive a surface impression from the film-like blank suggested by Young, which is so thin that the impressions received from the mold appear on the back of the film-like sheet, and which is also so thin that the blank is not self-sustaining or capable of preserving its form either before or after the mold impression is taken. This distinction was made by Lambert in the prosecution of his application and was accepted by the Patent The difference between a celluloid blank having a thickness of eighty-thousandths of an inch, formerly used by the appellee (and admitted by appellee's counsel at the hearing to be "sufficiently thick," etc.) and a celluloid blank having a thickness of fifty-thousandths of an inch now used by the appellee, does not change the character of the blank with respect to this feature. (Brief, p. 87.) The blank is still self-sustaining and has a thickness at least fifty times the depth of the deepest mold impressions, as indicated by the illustrative drawing on page 391 of the record.

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Regarding the argument that the appellee's process is in a general way different from the process of the Edison patent, it is to be observed that appellee's process is step by step a counterpart of the Edison process. produces a mold in the same way, inserts in the mold a blank of the same character, softens the blank by the application of heat, expends the softened blank against the mold by internal pressure, and contracts the impressed blank away from the surface of the mold by a reduction in temperature sufficient to entirely clear the surfaces and permit the longitudinal withdrawal of the duplicate from the mold. These are the steps of the process described in the Edison patent in The material, celluloid, used by the appellee is one of the materials specifically referred to in the Edison patent, as useful for the purpose. The use by the appellee of an air-pressure to expand the blank instead of a tapering mandrel is an immaterial difference. The tapering mandrel could undoubtedly be used with celluloid blanks, although it is probably true that the air-pressure is more convenient. Edison's patent is, however, for the process and the instrumentalities employed in carrying it out are of secondary importance. The advance made by Messer, which is lauded by appellee's counsel, was exceedingly slight, as shown in our main brief. The most that can be said is that the appellee has developed the details of a process well adapted for the making of celluloid duplicates; but it did this, admittedly, after the decision against Lambert in the interference case and with full knowledge that it was developing a process which Edison had previously developed with somewhat different details and upon which Edison was endeavoring to secure a patent.

The argument advanced by appellee's counsel and emphasized at the hearing, namely, that in view of the distinctions sought to be drawn over the Lioret and Young patents during the prosecution of the Edison application, by the affidavit of Wurth and the accompanying arguments of Edison's solicitor, the claims of the Edison patent should be limited, beyond what is required by their terms, to details not employed by the appellee, is not warranted by the facts. As pointed out in our main brief (p. 83) this argument was not accepted by the Patent Office; and the distinctions over Lioret and Young which were accepted by the Patent Office were those which appear in terms in Edison's claims. Under these circumstances the authorities (Brief, p. 84) are clear that distinctions advanced argumentatively, not accepted by the Patent Office and not embodied in the patent by changes in the claims, are not carried forward into the grant and cannot be used to limit the scope of the patent.

#### DOUBLE PATENTING.

The proposition of double patenting which appears in appellee's brief was not emphasized at the argument and is not referred to in appellant's brief. It is based upon the earlier grant of Edison's patent No. 667,662, which covers the casting process and which was issued upon an application filed two years later than the application for the patent in suit. Referring to the claims which are printed on page 47 of appellee's brief, it will be seen that the claim of this casting patent there referred to for purpose of comparison includes the element of "introducing a molten material into the mold." The two patents are based upon different inventive disclosures. While it may be true that claims 2 and 3 of the patent in suit (although Judge Platt thought otherwise) cover an invention broad enough to include the cast-

ing process, yet it is evident that the claims of the casting patent are limited to the specific disclosure of that patent and could not be based upon the specific disclosure of the patent in suit. The patent in suit, covering the broad invention and based upon the earlier application, was held up in the Patent Office by interferences, so that the later specific or improvement application became a patent of earlier date; but under these circumstances the authorities are clear that the patents are to be regarded in the order of their applications and that the patent of earlier date based upon the later application cannot be used to limit the scope of the patent of later date based upon the earlier application.

Thomson-Houston Co. v. Elmira Co., 71 Fed., 396.

Thomson-Houston Co. v. Ohio Brass Co., 80 Fed., 712.

Westinghouse Co. v. Dayton Co., 106 Fed., 724.

### JUDGE PLATT'S OPINION.

The case before Judge Platt was based upon two patents, the patent in suit and Edison's casting patent No. 667,662. The question of infringement was different there from what it is here. The defendant there used the casting process. Consequently only claims 2 and 3 of the patent in suit were involved in that case. Judge Platt disposed of the contentions regarding claims 2 and 3 of the patent in suit by finding that these claims were not infringed by a casting process. (Defendant's Brief, top p. 166). It is not at all certain that if the defendant's process before Judge Platt had been an expanding process, as it is here, he would not have found infringement of claims 2 and 3 in favor of the complainant. His conclusions as to the Lioret and Young patents (Defendant's Brief, p. 162) are favorable to the appellant The record before Judge Platt was also in this case.

quite different from the record in the present case. It is needless to add that Judge Platt's opinion is subject to review by the Circuit Court of Appeals for the Second Circuit and hence cannot be regarded as the final word even in that case—much less in the present case.

#### CONCLUSION.

The position of Edison as a pioneer in this art is admitted. The possibility of duplicating phonograph records was referred to by Mr. Edison as early as 1878 (Rec., p. 297). For years, however, this possibility existed only as a mere speculation. The difficulties, to the ordinary mind, would appear insurmountable. The problem to be solved was the exact copying of several million heterogeneous, closely associated and excessively minute indentations, each having its characteristic form. This copying must not be merely approximate, but must be so exact that to the ear the fine variations in pitch and tone, and the delicate shading as to quality, must be faithfully reproduced. Not only this, but a successful realization of Edison's early aspirations involved not the duplication of a phonograph record as a mere scientific possibility, but as a commercial proposition, at a sufficiently low cost and in such a manner that the work could be done in an ordinary factory by ordinary workmen. Although in his early patents of 1878 (Rec., pp. 207-208) Edison suggested a number of possible ways by which phonographic duplication could be effected, it was not until his caveat of 1888 that he had a definite conception of a successful process by which the long sought for solution was presented. Even then the bare suggestion only was made, and the succeeding years of experimenting were necessary to bring the process to the desired degree of refinement to make it not only commercial, but to secure the desired accuracy of duplication. As the records show, these experiments were continuous and involved a yearly expense of more than \$3,000, amounting in the aggregate to somewhat more than \$29,000. By 1897 the process was perfected and duplicates made thereby were, for the first time, used commercially.

Simple as the process may now appear to be, its completion represented the realization of twenty years of thought and hope and nine years of continuous and expensive experiment. One of the most difficult things in the world is, after the accomplishment of a result, to put oneself in the mental attitude of the inventor before the accomplishment of that result. In the present case, however, there is, we submit, ample evidence in support of our contention that the duplication of a phonograph record, far from being an obvious thing, was in fact an almost hopeless problem. For instance, in Edison's patent No. 382,419, dated May 8, 1888 (Rec., p. 744), a process is described in which the attempt was made to duplicate a phonograph record by a knurling operation; but it is admitted that such a process is practically inoperative and certainly uncommercial. In Edison's patent No. 784,582, of October 18, 1892 (Rec., p. 766), his application for which was filed prior to the caveat. a process is described for duplicating phonograph records by casting in a split mold; but it is also admitted that such a process is commercially inoperative. Even after Edison's caveat was filed and after his long period of experimentation had commenced, Lioret obtained his American and British patents, which also describe inoperative and uncommercial processes and which have never passed beyond the patents themselves. Finally, the British patent to Young. granted in 1894, more than five years after the filing of the caveat, likewise describes a practically inoperative and uncommercial process. If, as contended by the appellee, the process suggested by Edison in the patent in suit was an obvious process disclosing no patentable novelty, why was it that Edison himself early in 1888 was suggesting inoperative knurling and casting methods, and Lioret and Young in 1893 and 1894 were suggesting equally inoperative and uncommercial operations? The only answer must be that for some reason—either the inherent difficulties in the problem, or an incorrect understanding of the situation, or a misconception of the various phenomena involved—the solution of the difficulty was utterly beyond the ordinary skill of the workman in this art.

At the hearing it was urged by the appellee that the successful process involved nothing more than the introduction of a blank in the mold disclosed in Edison's patent No. 484,582 (Rec., p. 766), and its subsequent expansion, the removal of the duplicate following as a natural consequence. This is not a correct statement of the invention of the patent in suit, which necessitates a much finer analysis. To carry the invention into effect the process involves the following essentials:

- An electro-plated mold:
- (a) With cylindrical continuous walls, so that the resulting duplicate shall not be formed with fins or burrs, as would be the case with the split mold as disclosed in Edison's patent No. 484,582.
- (b) With a record in relief on its inner wall of such a shallow character relative to its width (the width being approximately ten times the depth) as to permit the detachment of the duplicate by diametric contraction without injury to the delicate record surface by reason of longitudinal contraction.
- 2. The introduction into the mold of a cylindrical blank slightly smaller in diameter than the bore, said blank presenting a body of sufficient thickness to maintain its shape

without collapsing during the act of engagement with the record surface and of sufficient thickness to take a surface impression of the record without being bodily distorted, and capable of responding with sufficient force to variations in temperature to detach itself from the mold against the natural suction produced by atmospheric pressure; and of a material having the following characteristics:

- (a) Capable of being softened to receive a surface impression and when cold to retain that impression in all of its delicate and highly diversified minute contours.
- (b) Having a coefficient of expansion differing in such a degree from that of the material of the mold that by a reduction in temperature common to both, contraction of the duplicate will so exceed the contraction of the mold that the engaging surfaces will be separated to clear the interlocking impressions and permit the duplicate to be readily removed by a direct longitudinal movement.
- (c) Having the inherent tendency or such coherence of its particles as will permit the duplicate to be shrunk from the mold without detachment of any portion of its record surface. In other words, the material must have the property of *setting*, so that the record surface will be fixed or permanent before the separation from the mold takes place.
- (d) Presenting a sufficiently smooth surface to give satisfactory reproduction.

Of materials having these peculiarities, both Edison and Lambert disclose the use of celluloid, although Edison, for commercial reasons, prefers to employ a hard soap of which phonograph records are commonly made.

- 3. Softening the blank to such an extent that it may readily conform its surface to the record impressions carried by the mold to correspond accurately with the latter.
  - 4. Expanding the blank so softened to receive such

impression by internal pressure, applied either by a tapering mandrel, as suggested by Edison, or by compressed air, as employed by the appellee, or in any other equivalent and well known way.

5. Subjecting the duplicate to a reduction in temperature to cause it to shrink diametrically and clear the engaging surfaces, notwithstanding the concurrent but smaller reduction in diameter of the mold, thereby permitting the duplicate to be withdrawn without injury to the record.

From this analysis it will be clear that an intelligent conception of an operative duplicating process involved much more than the very bald and general statement made at the hearing by the appellee, and necessitated not only the manufacture of an accurate mold, but the selection of materials having special characteristics, the observation of special dimensions and proportions and the carrying out of special and delicate manipulations. Patentability of Edison's process (and by this we mean patentability in the broad sense) can be safely predicated on the following propositions:

- 1. Under the authorities the patent is *prima facie* valid and the claims should be given their natural interpretation.
- 2. This presumption is much strengthened in the present case by reason of the interference with Lambert and the several other interferences in which the Edison application was involved. In other words, instead of the application pending before the examiner alone as an ex parte matter, as is usual in most cases, the application was considered by the examiner ex parte, and also inter partes on Lambert's motion to dissolve; it was considered by the commissioner of patents on the appeal on that motion; it was considered by the examiner of interferences on the merits of the interference; it was considered by the examiners-in-chief on appeal; and it was considered by the commissioner for a second

time on the merits. Under the practice it was the duty of any one of the patent office tribunals before whom the case came to indicate any reason why the claim should not be allowed, and notwithstanding the fact that the Lioret and Young patents were in the records of the Edison and Lambert applications, there existed no doubt in the minds of the patent office officials that the subject-matter of the 17th claim, on which the interference was contested, was patentable.

- 3. The invention was one that was long sought, and when it came it immediately supplied a public demand. Edison was admittedly the first to make a molded duplicate phonographic record.
- 4. The Lioret and Young patents were fully considered by the examiner, and the Edison claims were drawn for the express purpose of distinguishing from those references.
- 5. Lambert contended, both in the prosecution of his application and as a witness in the interference, that neither the Young nor the Lioret process was operative.

The situation, then, presented to this court is this: Having anticipated the possibility of duplicating phonograph records in 1878, Edison conceived in 1888 of the instrumentalities by which that speculation could be realized, and as a result of continued and expensive experiment accomplished the result in 1897 and applied for his patent promptly thereafter. During these experiments Young and Lioret rushed into the patent office with crude and undeveloped suggestions which never materialized and which were clearly inoperative. Appellee's predecessors filed their application in 1899, secured their patent by accident, were placed in interference with Edison, vigorously contested the same and were defeated. No more solemn notice of Edison's claims can be imagined. They went ahead after the termination of the

interference at their peril. Undoubtedly the appellee is doing what Edison in 1878 hoped to do. In our opinion, no less strongly, appellee is doing that thing in a way equivalent to the way suggested in Edison's patent. And in our opinion, and no less strongly, Edison made a patentable invention on which he secured claims which are capable of a broad interpretation which will include appellee's operations. As a matter of fact, we believe that up to the time of Judge Kohlsaat's decision on final hearing the appellee should have been under the ban of the preliminary injunction issued by Judge Kohlsaat and set aside by him as the result of fraud and misrepresentation on the part of appellee. Yet the fact is that notwithstanding the termination of the Lambert interference more than four years ago and the issue of the Edison patent more than two years ago, the appellee is still enjoying the fruits of its piratical operations. And in defense it relies principally on the purely technical point decided by Judge Kohlsaat that the invention was abandoned by Edison during the period of his expensive and continuous experiments and before the invention was regarded as completed. Coming as he does before this court with a patent having not only the usual but, in view of the circumstances, the unusual presumptions of validity in its favor, disclosing an invention which is undoubtedly new, an invention by which the hopes and aspirations of twenty years were realized and by which the seemingly impossible was accomplished, is he to seek in vain for the broad protection to which we think he is entitled, or is he to be put in the category of the inventor who makes a small and minor improvement and be confined to the exact details of his process to which the claims in terms are not limited? We believe that when the record in this case is carefully

considered the patent will receive the favorable consideration which in our opinion its position, at the very foundation of this art, warrants.

RICHARD N. DYER, PHILIP C. DYRENFORTH, Counsel for Appellant.

May 5, 1905.

MATE

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## THE OPINIONS OF THE COURT BELOW—COM-MENTS THEREON BY MR. DYRENFORTH AT THE HEARING.

Two opinions have been rendered in this case, the first opinion on the argument on final hearing and the second on a petition for rehearing. Neither opinion holds that the claims in issue are invalid in the light of the prior art: neither opinion holds that the process practiced by the defendant is not an infringement of the claims in issue. But the first opinion (Record, p. 620) dismisses the bill for want of equity chiefly on the ground that Mr. Edison unreasonably delayed filing his application for a patent, while the second opinion (Appellant's Brief, Appendix VII), though not in terms retracting the ground of dismissal of the first opinion, asserts as the main ground for denying the petition that the process had been experimented with by Mr. Edison before his numerous employes with no effort to maintain secrecy, so that the patented matters were made public more than two years before the patent was applied for. Each of the opinions is filled with errors of fact as well as of law.

As to the first opinion.

I. In the first paragraph (R., p. 620), the court says:

"On October 26, 1888, complainant filed in the patent office a caveat for a process of forming duplicate phonograms by forcing material made plastic by heat against a matrix formed upon the inside surface of a circular die and then permitting it to cool."

This is correct.

2. In the next paragraph the court says:

"The caveat asserts that the phonogram will contract sufficiently away from the record to allow of its being taken out."

This is also correct.

3. In the next paragraph the court says:

"From October 26, 1888, to March 5, 1898, the date of the application, no steps were taken by the patentee to secure a patent covering the matters set out in the caveat."

This is also correct.

4. Following this the court says:

"From the testimony of Mr. Edison it appears that during that period of ten years the process was in use in Edison's factory."

THIS IS INCORRECT. All the testimony in behalf of the complainant in this case on the subject of Mr. Edison's development and use of the process in issue is to the effect that for at least nine of the ten years mentioned the process was solely in the hands of Mr. Edison's experimenters, Dr. Schultze-Berge and the Wurths, father and son, whose work was confined to Mr. Edison's LABORATORY. No doubt the court below was misled by Mr. Edison's testimony on page 270 of the record, which is as follows:

"14 Q. When did Mr. Wurth start in on this work?

A. In the spring of 1889.

"15 Q. Has he been practically continuously working on the process from that time until the present time? A. Yes, sir; nearly the whole of his time.

time? A. Yes, sir; nearly the whole of his time.

"16 Q. And I presume he has made a large number of these molds and has produced copies therefrom by an expanding process as you describe above? A. Yes, sir; he has produced a great many matrices, and

has produced a great many copies from the matrices by expansion, which have been used commercially."

What Mr. Edison says is fully in accord with the other testimony, but it does not mean that the records made by the process were used commercially during the entire ten years, as the lower court appears to assume. On this same point Mr. Wurth testifies as follows (Record, p. 887):

"47 Q. Having reference to the records made, for example, in 1897, what were they used for; do you know what they are used for? A. They are used as masters to make machine duplicates from.

"48 Q. So that, in 1897, as I understand it, you considered the resulting duplicates to be substantially perfect; is that correct? A. Yes, sir; it was considered good."

There is not a line of testimony in the entire record which mentions any commercial use of the process earlier than that given above by Mr. Wurth. In fact, a commercial use of the process could not reasonably have occurred earlier than about the year 1897, because prior to that time there was almost no market for duplicates. On pages 274 and 275 Mr. Edison testifies as follows:

"46 X-Q. You knew, of course, all the time between 1888 and 1898 of the value that process would have in the arts, did you not? A. I knew in the last two or three years of its value, but in 1888 the phonograph was not commercial, and the company which attempted to commercialize it went into bankruptcy. It was not until seven years later that the public became a buyer of phonographs, but I always believed that they ultimately would appreciate the invention and, therefore, I worked continuously on this process with a view that some day it would be of great value, when the public did take hold, which they did in the last two or three years."

## 5. The court then says:

"A great many copies of records made from matrices were placed upon the market."

This is correct in one sense, but is incorrect in the sense in which it was evidently intended by the court. The testimony shows that from about the year 1897 onward, and until July, 1902, copies (mechanically produced) of records made from matrices were placed upon the market. It will soon appear that the court was under the impression that the copies made from matrices were themselves placed upon the market, which is not the fact. If it had been the fact, however, it would not have affected the rights of the complainant. Even if Mr. Edison had publicly used the process for two years prior to his application for a patent he would have lost none of his rights thereby.

### 6. Further on the court says:

"The record disclosed the fact that no particular effort was made to maintain secrecy among the employes in regard to the process. The fact that phonograms were placed upon the market in great numbers is satisfactory evidence that the process was a commercial success."

THIS IS ALSO INCORRECT, since phonograms made by this specific process have never been placed upon the market by the complainant, though shortly before the filing of the Edison application, the process of the patent in suit was used in the Edison factory for commercial purposes—that is, molded records made by the patented process were used as masters from which so-called mechanical duplicates were made, and the latter were sold.

The testimony of Mr. Wurth already quoted from page 287 of the record shows that mechanical duplicates of rec-

ords made by the process of the patent in suit were on the market as early as 1897. Mr. Edison testified in February, 1901, and at that time the complainant company was still marketing these mechanical duplicates. On pages 271 and 272 of the record he testifies as follows:

"22 Q. What are the duplicate copies made by this process at the present time used for? A. They are used as masters in the mechanical duplicating process, because they are so perfect that they are indistinguishable from the original master."

## 7. The court then says:

"Mr. Edison, himself, says: Answer to question 18: 'The process was, in a broad sense, just the same in 1888 as now.'"

This is correct, giving due emphasis to the expression, "in a broad sense."

The showing is, however, that what the Edison caveat of 1888 disclosed was nothing beyond a mere project. About nine years of persistent, laborious and extensive experiment followed before Mr. Edison was able to assure himself that the process could be practiced with sufficient accuracy and refinement to be commercially valuable. The extent of the work done is shown by Mr. Edison's testimony on pages 270-71, also by Mr. Wurth's testimony, pages 281 to 287, ending with the answer to Q. 46, and by the stipulated deposition of John F. Randolph, book-keeper at the Edison laboratory, showing that the experiments upon the process of the patent in suit up to March, 1898, when the application for a patent was filed, amounted to more than \$29,500. Nevertheless, in a broad sense, the process was the same in 1888 as it was when Mr. Edison made his application for a patent. At that time, however, it was impossible for Mr. Edison to say that the process could be executed in such a

manner as to be commercially valuable. He believed it could be executed with the required degree of refinement, and hence his persistent and costly experiments; but until he had fully succeeded it was his duty to refrain from applying for a patent. It has often been made a reproach to a patentee that he has rushed into the patent office with a mere undeveloped scheme which he perhaps might never bring to commercial success, and by obtaining generic claims forestall other patentees, who independently conceived, developed and perfected the same invention. Mr. Edison withheld his application until after he had perfected the invention; but even so he was ahead of all competitors in every step of the process. He was the first to conceive; he was the first to disclose to others; he was the first to reduce to practice; he was the first to use commercially, and he was the first to apply for a patent.

## 8. The court then says:

"In the meantime defendant had perfected his celluloid methods and processes and made a successful commercial product."

THIS IS INCORRECT. There is no evidence whatever that Lambert had perfected his celluloid methods and processes and made a successful commercial product up to the time of filing his application for a patent, which was on August 14, 1899. The evidence is plain that he did not have the process completed, and had not made a successful commercial product, up to October, 1897, because his operations at that time, as described by himself and by his witness Hamilton, were of a crude and impractical nature and were performed upon thin sheets of celluloid cemented into cylinders, while his specification for his patent says that thin walled tubes of celluloid can not successfully be used (page

790, line 27, et seq). The same thing is said by defendant's expert, Mr. Carter, page 174. The filing of the application on August 14, 1899, was a constructive reduction to practice, and there is not a syllable of testimony that Lambert reduced his invention to practice before that date.

Lambert's position, as compared with Edison's, is clearly set out in the opinion of the Board of Examiners-in-Chief, which is printed in the record from page 12 to page 33. After critically analyzing Edison's showing and according him a highly meritorious position with reference to the invention, the board on page 27 turns its attention to Lambert's showing, and the remainder of the opinion is devoted to a critical analysis of it, as follows:

"Lambert alleges that he conceived of the invention in May, 1892; disclosed it to others in the summer of 1893; made a working model in the fall of 1893 by this process; that he embodied a full-sized apparatus and with it reduced this invention to practice in September, 1897, at 67 and 69 Lake street, Chicago, Ill.; and that he has marketed about 2,000 record cylinders made by this process.

He filed his application on March 20, 1900.

Our findings on behalf of Edison place his reduction to practice before the date of conception alleged by Lambert. And the filing of the application of Edison was two years prior to the filing of the application of Lambert.

So Edison is first to conceive, to reduce to practice and to file his application; and all that Lambert alleges is a later conception and also a later reduction to practice about four months before Edison filed his application.

Edison is first in every act of invention and first in filing

an application containing the invention.

A conception by Lambert later than Edison's conception and a reduction to practice by Lambert later than Edison's reduction to practice avails nothing for Lambert. Nor does Lambert's patent, granted on an application later than Edison's application and while Edison's application was pending, constitute any bar to the grant of a patent to Edison on his application.

The right to the invention was vested in Edison by actual invention of and industrial use of the invention prior to the

application for that patent.

Edison cannot be held to have forfeited the invention to Lambert by failure to file his application, for he filed first, nor by failure to make the claim, for he made it so soon as he knew of Lambert's patent covering the claim.

Moreover the claim was made only four months after Lambert's alleged reduction to practice and before any use

of the invention to make it known to the public.

Manifestly Lambert has no case on his pleadings. But Lambert's case is not so strong as his pleadings.

There is not enough in his own testimony, if taken to be true, to satisfactorily establish that he ever had any process, much less the present process, for making stable records prior to the year 1897. This is evident from his answers on cross-examination.

Also, it is evident that he never disclosed the process to his witness Taylor (X-Q. 34), and Taylor's evidence does

not show any disclosure of it to him.

Up to October, 1897, according to his own testimony, Lambert had not explained this process to any one. He testifies that in October, 1897, he disclosed it to his witness Hamilton, and that between that time and the summer of 1899 he did not disclose it to any one. It was in the summer of 1899 that he met Mr. Philpot, who aided him financially.

Now he says that Hamilton, in October, 1897, saw him carrying out the process with a thick ring. That is his testi-

mony as to the disclosure.

Hamilton testifies that he saw Lambert make a record in September or October, 1897, and that he saw others which Lambert said that he made.

"Q. 8. Were these records thin, so that they would collapse easily in the hand, or were they thick enough to be self-sustaining? A. They were of varying thicknesses; some of them were thin, and his aim

seemed to be to obtain material by which he could

make them thick enough not to collapse.

"Q. 9. I now hand you a record marked 'Exhibit Lambert's 1897 Matrix' (Record) and ask you if you have ever seen anything like it? A. Yes, sir; I cannot tell whether it is the identical record, but it looks like one I saw Mr. Lambert make at 69 Lake street, along some time in the fall of 1897."

In answer to Question 10, p. 37, Hamilton states what he saw Lambert do in October, 1897. The first part of the statement is that he saw him make a matrix as this issue requires that it should be made. Then he described backing the matrix and then proceeds as follows with his story of

what he saw Lambert do:

"He then took a sheet of celluloid, or a strip, and softened it by dipping it in hot water, brought the two ends together and cemented them so as to form a ring just a trifle smaller than the inside of his matrix. Then he dropped his ring into the matrix and filled up the cylindrical space in the inside of the celluloid ring with rubber or some similar material. I think that was his first trial. He then put them into a vise and squeezed the rubber longitudinally, the idea being to have the rubber expand the celluloid cylinder up against the matrix. Before that was done the celluloid was heated in hot water and softened. After it had been in the vise, as he thought, long enough to set it up—perhaps three, five or ten minutes—the vise was loosened and the rubber, celluloid and all put into cold water, when it could be pulled out by hand."

On cross examination Hamilton testified:

"X-Q. I. You say, Mr. Hamilton, in describing the process which Mr. Lambert carried out in your presence in the fall of 1897, that he took a sheet or strip of celluloid and made a ring out of it; what was the thickness of this sheet? A. I do not know what the thickness was—they were thin; about like a sheet of paper; perhaps a little heavier.

"X-Q. 2. After the impression was made on this

ring of sheet celluloid, was the celluloid mounted on

a backing? A. Yes, sir."

"Re-d. Q. I. Do you mean by your last two answers to state that the celluloid ring which you saw formed, or was explained to you by this process, was so thin that it would not stand up? A. It is really impossible for me to tell you as to whether he formed the impression on the thin ring and then backed it up or backed it up first.

"Re-d. Q. 2. The records you saw produced, however, were self-sustainable, were they not? A. Yes,

sir.'

Now there is nothing proven by this testimony more than is stated by Lambert that he did in the summer and fall of 1893. See his answer to Question 21. It is the same old rubber-plug and vise apparatus operated on a celluloid ce-

mented-edge ring of the thickness of paper.

His own description of the 1897 procedure (answer to Question 24) and of subsequent discoveries and improvements (answer to Questions 24 and 29) disclose three means for expansion, (1) a rubber plug, (2) a printer's-roll composition and gelatine, and (3) a sectional expanding mandrel. And these answers disclose that there was difficulty in maintaining the joints of his rings made of sheets and in the softening of the blanks, and in determining the time which should elapse between the covering of the ring with the solvent and the forcing of it into the matrix. Now the rubber-plug device was his first device. It was not until afterwards that he discovered the cement for making proper joints and the proper interim between coating with the solvent and pressing. And when we come to his application we find all of these means for compression thrown away and hot air and steam used in their stead, and we find nothing of cylinders made of sheets cemented at their edges or of these sheets first made and then backed by thick rings.

And there is no testimony that any of the records made by him in 1897 were successful in use. And not one of

them is produced.

He decries in his patent the making of records from thin

plates and gives the reason why they will not produce true' records, and yet he has no evidence certainly establishing that he had in 1897 worked this process in such a manner as to produce a thick record of commercial thickness by pressure within the matrix. There is nothing more proven in 1897 than the old thin-paper thickness ring with cemented joints which he had been making since the fall of 1893, made by the first devised crude extemporized apparatus.

We cannot regard a process which has not been executed to make the product which his patent calls for, as reduced to practice.

He had conceived of a process the same in general steps as this, which would form rings too thin for use as records. But he had not then conceived of the changes by which that process was afterwards converted into one which will make the stable rings of commercial size, length and thickness which his perfected exhibits present and which his patent calls for. When that was first done is not proven. It is proven that none were put on the market until after his application was filed, which was more than two years after his October, 1897, experiment in the presence of Hamilton. His own conduct is ample proof that he did not have this process until after the summer of 1900.

According to the evidence he was a poor man in 1897, for from that time on he had no salary and had a wife and child and was earning only about \$30 a month, and had hired a shop with the privilege of paying for its rent what

he could and when he could.

Yet then, as he contends, he had perfected this process and had achieved his purpose of making an infrangible celluloid record. If he had, there was, and he knew there was, a relief from his impoverished condition. Yet from 1897 to 1900 he neither explained this process or showed its product to any one. He says they had no confidence in him. It was not needed. What was needed was confidence in his invention. That would have come and the money to back it, by showing the new infrangible commercial records giving as good sound as the frangible wax records. He had the process perfected for making them. He had made fragmentary records. It cost almost nothing to make a few

records and show them. He not only never made one complete, which is a fact significant that he knew that there was no use in trying to make one complete until he could make a fragment complete and practical in use-but he has not kept a single one of his incomplete productions of 1897 or any record formed anterior to the filing of his application.

The conclusion is inevitable that his exhibition to Hamilton in 1897 was one of an unsuccessful experiment, and that it was not long after that when he had obtained an apparatus fit to make records of commercial length and thickness carrying records which reproduced the sound as excellently as the original record, or had conceived of and practiced the details of the process necessary to be followed in working the proper appatatus.

A process is not perfected until it is wrought to effect its result; nor, when its result is a product, until it has produced the perfected product fit for industrial use.

That affair of 1897 was not a reduction to practice of the process of this issue. It can only with difficulty be accepted

as a disclosure of a conception of the issue.

If so accepted, Lambert has a conception only prior to

Edison's application.

It is urged on behalf of Lambert that Edison's application does not disclose the process of the issue and that consequently there is no interference in fact between the two applications or between the application and the patent as the case may be.

The contention specifically is as to fact, that the softening of the wax cylinder is not disclosed in the Edison applica-

This matter is within our jurisdiction only for consider-

ation whether we shall act under Rule 126.

The question is one of fact, dependent on the action of a wax ring of considerable diameter and thickness under the influence of heat to change its size to a very small extent, and to enable it to receive impressions in depth so small as one one-thousandth of an inch.

In such a case and in the presence of the testimony of experts in handling wax records, we decline to express any opinion as to this question of fact or as to the question of an interference in fact.

Especially do we decline for the reason that two tribunals of this office have held that there is an interference in fact and have so held on the face of the applications.

The decision of the Examiner of Interferences awarding

priority to Edison is affirmed."

Even after Lambert had accomplished everything in his power, his process, according to Philpot, was unsuccessful commercially. Philpot says, in answer to Q. 6, p. 135, that the defendant company abandoned the original Lambert patent because it was found not commercially valuable, owing to faults which were overcome by the Messer improvement.

On page 136 he says:

"It seemed for a time as if we would have to abandon the making of celluloid records altogether. The Lambert processes were not complete; the final step was lacking. There seemed, so far as we knew, no way in which a commercially perfect celluloid phonograph record could be produced."

In this connection it is to be borne in mind that the defendant company was not organized until about May 1, 1902 (Lambert, p. 99.)

With the foregoing before the lower court it seems incomprehensible that the court in its opinion should have made the assertion last quoted.

## 9. The court then says:

"Complainant, about July 1, 1902, claimed to use the process (X.Q. 110), at which time Edison says (X.Q. 109), mechanical duplicates were abandoned."

This is correct; in fact the complainant had been using it since 1897; though from what immediately follows in the

opinion, it is evident that the court wholly misapprehended the meaning of "mechanical duplicates."

#### 10. The court then says:

"It is to restrain defendant from manufacturing these mechanical duplicates that complainant seeeks to invoke the power of the court in support of its alleged rights under the caveat."

THIS IS INCORRECT. So far as appears in this case the defendant is not making, and has never made, "mechanical duplicates." Moreover, the complainant is asserting no rights, and it has no rights to assert, under the CAVEAT. The complainant is asserting its rights under the patent in suit.

## II. The court then says:

"No reason is disclosed why ten years should have followed the filing of the caveat."

THIS IS INCORRECT. There is abundant testimony in the record that experiments were continued at heavy expense in Mr. Edison's LABORATORY (NOT factory), during the whole of that ten years.

## 12. The court then says:

"In an age when science is making rapid progress one may not lie still and see advances made even along lines suggested by him and then after years of forward movement assert his prior claim to the broad invention."

There is nothing in the record which calls forth the foregoing proposition. It is founded upon the erroneous assertions of fact noted above. 13. The court then says:

"Complainant and its grantors have slept on their rights."

THIS IS INCORRECT. They did specifically what they had a right to do under the law, as expressed in decisions of the United States Supreme Court.

In Bates v. Coe, 8 Otto, p. 31, the Supreme Court says:

"Inventors may, if they can, keep their inventions secret; and if they do for any length of time, they do not forfeit their right to apply for a patent unless another in the meantime has made the invention, and secured by patent the exclusive right to make, use and vend the patented improvement. Within that rule and subject to that condition, inventors may delay to apply for a patent: but the Patent Act provides, as before stated, that the defending party in a suit for infringement may plead the general issue, and, having given the required notice, may prove in defense that the patented invention had been in public use or on sale for more than two years before the alleged inventor filed his application for a patent, and the provision in that event is, that if the issue be found for the party setting up that defense, the judgment or decree shall be in his favor."

In Agawam Woolen Co. v. Jordan, 7 Wall., 583, the Supreme Court says:

"Undoubtedly, an inventor may abandon his invention, and surrender or dedicate it to the public; but mere forbearance to apply for a patent during the progress of experiments, and until the party has perfected his invention and tested its value by actual practice, affords no just grounds for any such presumption." Citing Kendall v. Windsor, 21 Howard, 322, and Pennock v. Dialogue, 2 Peters, 1.

14. The court says finally:

"To hold otherwise would be unjust to defendant and others who have developed the art."

THERE IS NO FOUNDATION FOR THE STATE-MENT THAT THE DEFENDANT AND OTHERS DEVELOPED THE ART. The showing is that Edison was far in advance of all others, not only in completing the invention, but in applying for a patent for it.

The foregoing opinion is in all about the length of one page of the printed record. It is founded upon a record of upwards of eight hundred pages. The fact that in this short opinion seven out of fourteen of its propositions, and these of the most vital character, were erroneous, led complainant's counsel to think that upon a review of the case, the lower court might reverse its finding. Accordingly a petition for a rehearing was filed, in which the errors were plainly pointed out (Appellant's Brief, Appendix I-VI), but as stated above, the petition was denied (Appellant's Brief, Appendix VII-VIII).

In the supplemental opinion, after saying that the motion was based upon the assumption that the court did not give due weight to the facts tending to show that the delay referred to in the former opinion was due to the fact that complainant was constantly experimenting with a view of creating a perfect commercial article, the court proceeds to set out the steps defined in Mr. Edison's caveat, filed October 26, 1888, and adds:

1. "Whatever experimenting was carried on by complainant during the twelve years between the date of the caveat and that of the patent in suit, did not involve a modification of the said two steps of the process."

The period between the filing of the caveat and the granting of the Edison patent was nearly fourteen years instead of twelve years, due largely to the fact that the application was involved in a series of vexatious interferences, one of which was with Lambert. The period which elapsed between the filing of the caveat and the filing of the Edison application for a patent was about nine years and four months, and the period which elapsed between the filing of the caveat and the earliest use of the invention for commercial purposes in making "mechanical duplicates" was approximately nine years. Properly qualified in the matter of time, the above statement of the court is substantially correct—in a broad sense.

But the Supreme Court in the case of *Elizabeth* v. *Pavement Company*, 7 Otto, 126, is very clear upon the point that the experiments made may or may not result in a change of the original process. It is sufficient that the inventor was endeavoring to bring the invention to perfection. In that case the court said:

"He may see cause to alter or improve it or not. His experiments will reveal the fact whether any and what alterations may be necessary \* \* \* and though, during all that period, he may not find that any changes are necessary, yet he may be justly said to be using his machine only by way of experiment; and no one would say that such a use, pursued with a bona fide intent of testing the qualities of the machine, would be a public use, within the meaning of the statute. So long as he does not voluntarily allow others to make it and use it, and so long as it is not on sale for general use, he keeps the invention under his own control and does not lose his title to a patent."

### 2. The court next says:

"There is some confusion in the record as to whether the process was not substantially abandoned."

THIS IS INCORRECT. The showing is to the exact contrary. This error on the part of the court below probably arose from the cross examination of complainant's witness, Mr. Frank L. Dver, on pages 386-7. Since about July 1, 1902, the complainant has been making its duplicate records under the Miller and Aylesworth patent (Dyer, pp. 385-6). This process is described by Mr. Dyer in answer to X.Q. 105, page 385. It is a casting process, and is included within certain claims of the patent in suit, but is not included within the more specific claims. From the year 1897 until about July 1, 1902, the complainant was using the process covered by the specific claims charged to be infringed by the defendant herein, though it was not putting the duplicates themselves upon the market, but was using them as masters from which to make mechanical duplicates. In X.O 109, page 386, defendant's counsel asked Mr. Dyer as follows:

"When did you abandon the specific process set forth in the patent in suit for the process which is now carried on?"

The witness says nothing about any abandonment of the process of the patent in suit, specific or general, but says that the specific process was carried on commercially up to the time of the abandonment of mechanical duplicates.

As we have said the casting process, now used by the complainant, is within the broad claims of the patent in suit, but even if it were not, and even if the complainant had wholly ceased to operate under the patent in suit, this fact would not give the defendant a right to use the patented process. In the case of *Hoc* v. *Knap*, 27 Fed., 204, decided by Judge Blodgett, there is an expression to the effect that a patentee must either use his invention himself or permit others to use it; but that view has been held to be unsound

by every court since, which has had occasion to consider the same question.

In Consolidated Roller Mills Co. v. Commbs, 39 Fed., 803, Judge Brown (now Mr. Justice Brown), referring to Judge Blodgett's decision, said:

"I find myself unable to concur in this view. A man has a right to deal as he chooses with his own. I know of no reason why a patentee is bound to make use of his own inventions, or to license others to use them, any more than the owner of a manufacturing establishment is bound to run it for the benefit of his neighbors or employes. As observed in the earlier portion of this opinion, the question of licensing another to use an invention is one which the patentee alone has the right to answer; and courts cannot lawfully compel him to make use of his invention, or to permit others to use it against his will."

In Campbell Printing Press & Mfg. Co. v. Manhattan Ry. Co., 49 Fed. Rep., 935, Judge Lacombe commented upon the decision in Hoe v. Knap, as follows:

"Judge Blodgett, however, at final hearing, refused an injunction against an infringer, holding that, 'under a patent which gives a patentee a monopoly, he is bound either to use the patent himself, or allow others to use it, on reasonable terms.' No authorities for this proposition, however, are cited in the opinion, nor is such a construction of the statute, which provides that a patentee shall receive a grant of the 'exclusive right to make, use and vend' his invention, supported by argument. Although great weight is always to be given to decisions of the circuit courts, they are not controlling authority when the same question is presented in another circuit. I do not, therefore, feel constrained by this decision to refuse the complainant its injunction, because it asks more for a license than defendant cares to pay."

In Heaton Peninsular Button-Fastener Co. v. Eureka Specialty Co., 77 Fed. Rep., 294, Judge Lurton, speaking for the United States Circuit Court of Appeals for the Sixth Circuit, defines the rights of a patentee as follows:

"If he see fit he may reserve to himself the exclusive use of his invention or discovery. If he will neither use his device, nor permit others to use it, he has but suppressed his own. That the grant is made upon the reasonable expectation that he will either put his invention to practical use, or permit others to avail themselves of it upon reasonable terms, is doubtless true. This expectation is based alone upon the supposition that the patentee's interests will induce him to use, or let others use, his invention. The public has retained no other security to enforce such expectations. A suppression can endure but for the life of the patent, and the disclosure he has made will enable all to enjoy the fruit of his genius. His title is exclusive, and so clearly within the constitutional provisions in respect of private property that he is neither bound to use his discovery himself, nor permit others to use it. The dictum found in Hoe v. Knap, 27 Fed., 204, is not supported by reason or authority.'

The above language of Judge Lurton is quoted with approval by the Supreme Court in *Bement & Sons* v. *National Harrow Co.*, 186 U. S., page 70.

### The court next says:

"It would seem that the efforts made during that period were directed mainly to securing a commercial article and pertained to details which involved matters of material, finish and the like."

This is substantially correct as far as it goes, and of itself it is totally inconsistent with any theory of abandonment. The efforts, however, extended beyond were material and finish. To make a commercial article loudness and clearness had to be obtained and "scratchiness" of sound overcome.

## 4. The court next says:

"It is difficult to arrive at a motive for a twelveyears' delay in securing a patent in pursuance of the caveat, unless complainant thought the rights sought to be protected were of no appreciable value and not liable to be appropriated."

No doubt upon reconsideration the court would substitute for the words "twelve-years' delay in securing a patent," the words "nine years and four months in applying for a patent." It might easily be difficult for one not familiar with the difficulties and perplexities of this particular art to understand why the experiments should have necessarily continued over such a long period before the inventor was satisfied with the results, but the evidence is that that length of time was thus consumed, and at an expense of upwards of twenty-nine thousand (\$29,000) dollars; and it would be difficult to conceive of a more complete refutation of any theory of abandonment than is to be found in this fact.

#### 5. The court next says:

"It is a noteworthy fact that nothing was done to patent the process until defendant employed celluloid in the manufacture of records and made them successfully."

THIS IS INCORRECT, and incorrect to a degree which is amazing. The showing is to the exact contrary. Edison filed his application March 5, 1898. At that time he was using the process for commercial purposes (not, however,

marketing the duplicate records themselves, but using them as secondary master records for making "mechanical duplicates," which latter were marketed). At this time, as will be pointed out further on, Lambert had not produced a successful ceiluloid record, and at that time the defendant had not come into existence.

## 6. The court next says:

"So far as disclosed in the evidence, every principle claimed by complainant to have been infringed by defendant, and which defendant uses, was fully disclosed in the caveat."

This is correct in a broad sense. In the same broad sense it is correct as to the abortive and worthless results obtained by Lambert in the fall of 1897, which constituted the culmination of his achievements in any possible race which might have existed between himself and Edison; and there is no showing whatever that he progressed any farther than this until more than a year after Edison's application was filed. The earliest showing of a successful and commercial application of the process by Lambert is his application for a patent filed August 14, 1899; and the showing of the testimony is that this was so deficient in practical results as to prove a failure.

#### 7. The court next says:

"It is also logically deducible from the evidence that not only the matters covered by the caveat were made public, but the complainant made free use of said principle and some of the results of experiments in perfecting the record before his numerous employes, and made no effort to maintain secrecy in regard thereto."

THIS IS INCORRECT. There is no showing whatever from which such a deduction can logically be made. There is nothing in the record to indicate that Mr. Edison's numerous employes, or any of them, knew anything of the process until it was first used for making secondary master records from a primary master record, which was a little ealier than the application for the patent in suit, and there is no definite showing that any of the ordinary employes knew it then. Of course the two Wurths understood it, and so did Dr. Schulze-Berge, in his lifetime, because they were employed by Mr. Edison to perform the extended and constant laboratory experiments which were made. It may be true that there is no showing that these experimentors were pledged to secrecy, but the very nature of their employment implies a confidential relation and carries with it an inherent pledge of secrecy, as solemn as any which exists between an attorney and his client.

In Lyman v. Maypole, 19 Fed., page 735, Judge Blodgett said:

"The law permits an inventor to construct a machine which he is engaged in studying upon and developing, and place it in friendly hands for the purpose of testing it, and ascertaining whether it will perform the functions claimed for it; and if these machines are strictly experiments, made solely with a view to perfect the device, the right of the inventor remains unimpaired: but when an inventor puts his incomplete or experimental device upon the market and sells it, as a manufacturer, more than two years before he applies for his patent, he gives to the public the device in the condition or stage of development in which he sells it."

See also Huntington v. Mill Co., 109 Fed., 269.

However, the case of *Elizabeth* v. *Pavement Co., supra*, is the highest authority on this point, and is conclusive in itself.

#### 8. The court next says:

"The record plainly discloses that the patented matters were made public more than two years before the patent was applied for."

THIS IS INCORRECT. There is no showing whatever that the "patented matters" were known to anybody aside from Mr. Edison, his necessary confidential laboratory assistants and perhaps his patent solicitor, more than two years, or at any time before the application for the patent.

9. The court next says, and this as if it has some relation to what has just preceded:

"The caveat remained in force only one year."

It is correct to say that the caveat remained in force only one year, but it is not apparent what pertinency this fact had in the mind of the court. Possibly the court supposed that upon the expiration of a caveat the disclosures contained in it became open to the public. If so, the court was wholly wrong. A caveat never becomes accessible to the public, unless by the action of the caveator, or his assigns. A caveat is filed in the secret archives of the Patent Office. Many attorneys regard it as a wholly useless provision of the law. Its purpose is to give the caveator an opportunity to perfect his invention before applying for a patent, and at the same time afford him an opportunity to engage in an interference with any other person who may file an application for the same thing while his caveat is in force. In such an event, he is notified and given ninety days in which to file his application, for the purpose of the interference. The caveat is in no sense a patent, and confers no rights except the mere right of notice as defined above. It remains in force one year, and may be renewed from year to year for an indefinite period. After the caveat has expired by

limitation, whether at the end of one year, or two years, or more, it remains where it always has been, in the secret archives of the Patent Office. The nature and effect of a caveat are fully explained in Volume 2, of Robinson on Patents, forming the subject of Section II, pages 20 to 26 inclusive. On page 23, under the sub-head "Duration of Caveat" the author says:

"A caveat, once filed, remains in force for one year from the date of its acceptance by the Patent Office. At the expiration of this term it may be renewed for another year by the payment of an additional fee; and so on from year to year at the pleasure of the caveator. If not renewed, it still remains in the secret archives of the Office, although it ceases to secure any rights to the inventor."

## 10. In conclusion the court says:

"It is unnecessary to pass upon the question of laches. Complainant distinctly gave to the public his basic invention and cannot be heard now to complain that defendant made use of it."

THIS IS INCORRECT under the law, in the light of the facts presented in the record.

It undoubtedly follows from the complete misconception of the evidence on the part of the court below which we have noted above. As a matter of fact, there is not the slightest proof that the invention was in public use or on sale more than two years before Edison's application for a patent, as has clearly been shown. Evidently the court had in mind that the complainant had been practicing the process openly and putting the duplicate records upon the market more than two years before the application for a patent.

Mr. Edison, in his oath to his application, said that the invention had not been in public use or on sale for more

than two years prior to the application. His testimony and that of Mr. Wurth, pertaining to the commercial use, is entirely consistent with that oath. Their statements should, therefore, be so interpreted as to harmonize with the oath, and not be subjected to a forced and unnecessary interpretation which will make them contradict the oath.

The defense seeks to deduce public use on the part of Edison from his preliminary statement in the interference (p. 419), wherein he says he conceived, disclosed to others and reduced to actual practice and made drawings of an apparatus intended for the carrying out of the method or process defined by the issue of said interference, in the month of October, 1888, and that since that time he has continuously practiced the said method or process at his laboratory at Orange. New Jersey, and has made a great number of duplicate records from said process. A preliminary statement is a mere pleading. It is not evidence of any fact in an interference. It is only a general statement, serving as a limitation upon the testimony. This preliminary statement is supported by the caveat, together with the testimony of Mr. Edison and Mr. Wurth. A process may of course be "practiced" either experimentally or commercially. Comparing the preliminary statement with the testimony referred to it will be seen that they are perfectly consistent with each other. Lambert could have raised the issue of public use against Edison in the Patent Office, or it could have been raised by the office sua sponte, but nothing of the sort was done. In this case the preliminary statement and the showing which it forestalled should be understood as they were obviously intended, and as they were understood by the Patent Office.

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#### IN THE

# United States Circuit Court of Appeals

FOR THE SEVENTH CIRCUIT.

OCTOBER TERM, A. D. 1904.

No. 1154.

NATIONAL PHONOGRAPH COMPANY,
Appellant,

US.

LAMBERT COMPANY, Appellee.

- 1. Reply to Appellee's Arguments.
- 2. On the Opinions of the Court Below.
- 3. Authorities on Issues Raised by Appellee.

RICHARD N. DYER, PHILIP C. DYRENFORTH,

Counsel for Appellant.

GEO. HORNSTEIN CO., PRINTERS, CHICAGO

## AUTHORITIES ON ISSUES RAISED BY APPEL-LEE.

#### I. DELAY IN APPLYING FOR PATENT.

An inventor may delay to apply for a patent until ready to do so without affecting his rights in the absence of intervening equities.

Ide v. Trorlicht Duncker and Ranard Carpet Co., 115 Fed., 137, 144, C. C. A., 8th Circuit, 1902, SANBORN:

The court, in commenting upon the right of an inventor to delay making application for a patent after he has made his invention, said:

"There was no law which required him to apply for a patent upon his invention as soon as he made it. The Acts of Congress gave him the right to apply for and to obtain a patent upon his combination at any time after he conceived it, provided only that his invention had not been 'in public use or on sale for more than two years prior to his application,' and that it was not 'proved to have been abandoned.' Revised Statute, Sec. 4886. There was no evidence of any prior use or sale of this improvement. Clear evidence of an intention to dedicate an improvement to the public is indispensable to establish an abandonment. There was no evidence of an abandonment at the hearing of this case, and the patent in suit and the application upon which it is based are persuasive proof that Ide never intended to dedicate, and never did dedicate the improvement they secured to the public."

## Miller v. Smith, 5 Fed., 359. R. I. CLIFFORD:

"Inventors may, if they can, keep their inventions secret, and if they do it is a mistake to suppose that any delay to apply for a patent will forfeit their right to the same or present any bar to a subsequent application."

Western Electric Co. v. Sperry Electric Co., 58 Fed., 186, C. C. A., 7th Circuit. Woods:

The court, in passing upon the question of the delay by the inventor, claimed by the defendant as amounting to an abandonment, said:

"As tending to show such abandonment, reference is made to Scribner's (patentee of patent in suit) own testimony, to the effect that he made the discovery and reduced it to successful form in an experimental lamp more than two years before he applied for a patent: that he dismembered that lamp, and laid away its parts for reference, but never afterwards used them, and did not produce them in evidence; that he has never caused the lamp to be manufactured for sale, but has put upon the market in large numbers another lamp, which he invented later, and that he made no earnest effort to obtain this patent until he had seen the Sperry lamp. But, viewed in the strongest possible light, these things show no purpose to abandon the invention, because, so long as it was not in public use, and no one else had made and procured a patent for the same discovery. his right to apply for a patent was subject to no restriction. Even if he had forgotten the invention, or laid it aside as worthless,-abandoned it,-he had the right to take it up again, and to proceed as if he had then first made the discovery. And once the application was filed it became notice to the world of his claims and rights as they should finally be defined by letters patent, and that notice in this instance, besides being lawful, was fair and ample, because one of the experts in the case has testified that 'from the dimensions of the drawings' he made a lamp which he found 'to operate as described in the specification.'

"Scribner denies that he had seen the Sperry lamp before his own patent was granted; and even if he did acquire earlier knowledge of Sperry's patent, it was only natural and right, as the quotation from the decision of the Supreme Court recognizes, that he should be stimulated to a fresh attempt to obtain a patent, it being clear beyond dispute that he was the first discoverer."

Christensen v. Noyes, 90 O. G., 223, Ct. Appls., D. of C., 1899. ALVEY, J.:

"It must, however, be borne in mind that the mechanism of the invention itself was of a most complex, difficult and delicate character, and such as required not only the application of a high order of inventive genius, but in order to obtain assurance of success to make numerous and varied experiments which would require considerable time, and in such case it is a settled principle in practice as well as in reason that forbearance to apply for a patent during the progress of experiments and until the party has perfected his invention and tested its value by practical experiment affords no ground for presumption of abandonment (Agawam v. Jordan, 7 Wall., 583), nor should such delay operate in any way to the prejudice of the inventor or to his right to obtain a patent for his invention—certainly not as against a subsequent or junior inventor."

#### ABANDONMENT.

Disposition of court to declare.

Graham v. McCormick, 11 Fed., 859, Illinois:

"In the light of all the testimony we conclude that what was done by the patentee with reference to the use of the machines in 1863, was intended by him, and was, in fact, for the purpose of experiment, and as a test of the machines with a view to their perfection. This part of the defense rests upon a claim of forfeiture of rights secured by the patent. To justify the court in sustaining it the proof should be clear and satisfactory; the right of the infringer to invalidate the patent for this cause should be undoubted. In view of these

considerations we think the patent should be held valid against this objection."

See also Ide v. Trorlicht Duncker and Ranard Carpet Co., 115 Fed., 137, 144, C. C. A., 8th Circuit, 1902. SANBORN.

#### 3. WHAT CONSTITUTES EXPERIMENTAL USE.

"Experimental use is in two sorts. (I) In order to enable the inventor to test the practicability or utility of his invention, and to prove and perfect the same. Experiments of this sort can not, in the nature of things, always be made by an inventor alone, but must sometimes be carried out by placing the invented article in the hands of others. A use solely for experiment of this sort to satisfy the inventor, and, perhaps, as Judge Lowell suggests, to satisfy some one from whom the inventor hopes to receive aid in patenting the invention, is not deemed a public use, within the meaning of the statute."

Emery v. Cavanaugh, 17 Fed., 242, New York. Shipman: The application for the patent in suit was made June 30, 1873. The court says:

"The patentees filed a caveat dated Dec. 9th, 1870, setting forth their invention as it was then conceived. On Dec. 20th, 1871, the caveat was renewed. Between the fall of 1870 and the expiration of the renewed caveat the patentees were constantly experimenting, at great expense, upon the machine as finally perfected, and upon machines which should accomplish the same result by different kinds of molds, but finally came back to a device described in the caveat, a marked feature of which was a divided mold. During this period they used the machine in the condition in which it was from time to time, incidentally for profit, but the witness, whose testimony is hereafter referred to, says: 'It was his (Simonds') idea to keep the ma-

chine as much from view as possible, and be courteous to visitors.'

"Mr. Stackpole, a witness called by the defendant, was a machinist in Simonds' employ for five years, commencing about the beginning of 1870, and worked upon this machine. 'He saw four years' of experimenting on the machine.' These experiments finally resulted in the adoption of substantially the original model of 1870, but, meantime the machine had been changed in the auxiliary parts. Meanwhile it made counters freely, which were sold, but no machines were made which were sold, or were used by others, or were licensed, and the machine could only be tested by the making of counters upon it. Until about the time of the expiration of the renewed caveat, the invention had not reached a position of perfection or of completion where the inventors thought that it was fit, or where it probably was fit, to be patented."

## In Jennings v. Pierce, 3 B. & A., 361, the court says:

"Acts of an inventor to determine the value, utility or success of his invention, are to be liberally construed, if the acts are not inconsistent with the clear intention to hold the exclusive privilege. 'Public use of an invention, unless for the patentee himself, for profit, or by his consent or allowance, will not work a forfeiture of his title, as such forfeiture is not favored, unless it clearly appears that the use was solely for profit, and not with a view of further improvements, or of ascertaining its defects, or for any other purpose of experiment in reducing the invention to practice.' (Citations.) It would be a harsh limitation of the statutory rights of an inventor, which should give to a naked infringer the privilege of using an invention because the patentee had attempted, in good faith and in secrecy, to incidentally make his experiments of some pecuniary benefit, while he was patiently endeavoring amid many failures, to remedy the defects of the machine, test its value, and ascertain whether it could be used advantageously, and whether it ever would be of any benefit either to himself or to the public. Courts have not favored this forfeiture, and have required clear evidence to establish the fact that the use was not experimental. In this case, I am satisfied that the evidence is not of that character which has ordinarily been required to prove that an inventor had, by his own acts, forfeited his right to the exclusive ownership of the invention."

## Smith & Griggs Mfg. Co. v. Spreg, 123 U. S., 149:

"A use by the inventor, for the purpose of testing the machine, in order by experiment to devise additional means for perfecting the success of its operation, is admissible."

The court then comments upon the effect of a sale by the inventor of one of his machines unconditionally as affecting the question of public use, and adds:

"On the other hand, the use of an invention by the inventor himself, or by another person under his direction, by way of experiment, and in order to bring the invention to perfection, has never been regarded in this court as such a public use as under the statute defeats his right to a patent. Shaw v. Cooper, 7 Peters, 292; Elizabeth v. Pavement Co., 97 U. S., 126; Egbert v. Lippmann, 104 U. S., 333."

PRIOR FOREIGN PATENTS, DRAWINGS AND PUBLICATIONS
AS ANTICIPATION.

Seymour v. Osborne, 11 Wall., 516:

An attempt was made to defeat the patent upon which suit was brought, on the ground that the invention covered by the patent was disclosed in a prior foreign publication.

"Patented inventions cannot be superceded by the mere introduction of a foreign publication of the kind, though of prior date, unless the description and drawings contain and exhibit a substantial representation of the patented improvement in such full, clear and exact terms as to enable any person skilled in the art or science to which it appertains to make, construct and practice the invention to the same practical extent as they would be enabled to do if the information was derived from a prior patent. Mere vague and general representations will not support such a defense, as the knowledge supposed to be derived from the publication must be sufficient to enable those skilled in the art or science to understand the nature and operation of the invention, and to carry it into practical use. Whatever may be the particular circumstances under which the publication takes place, the account published, to be of any effect to support such a defense, must be an account of a complete and operative invention capable of being put into practical operation."

Carnegie Steel Co. v. Cambria Steel Co., 89 Fed., 721.

Eames v. Andrews, 122 U. S., 40.

Western Electric Co. v, Millheim Electric Tel. Co., 88 Fed., 505.

Badische Anilin & Soda Fabrik v. Kalle, 94 Fed., 163.

Cahill v. Brown, 3 Bann. & Ard., 580.

Goff et al., Stafford et al., 3 B. &. A., 610.

Cary v. Lovell Mfg. Co., 31 Fed., 344.

Hanifen v. E. H. Godshalk Co., 84 Fed., 649.

The court, in holding plaintiff's patent to be valid in the face of a certain foreign patent introduced by the defendant to defeat the novelty of plaintiff's patent, states the rule to be well settled and familiar "that an invention patented here is not to be defeated by a prior foreign patent unless its descriptions or drawings contain or exhibit a substantial representation of the patented invention in such full, clear and exact terms as to enable any person skilled in the art

or science to which it appertains, without the necessity of making experiments, to practice the invention"; citing Seymour v. Osborne, 11 Wall., 516; Cahill v. Broten, 3 Bann. & A., 580, 587."

Bignall v. Harvey, 18 Blatch., 353:

To defeat plaintiff's patent defendant introduced a prior English patent. The court says:

"It is sufficient to say that the description and drawings of Cartier (patentee of alleged anticipating patent) do not furnish such clear and definite information as to enable a skilled person beyond any reasonable doubt by following them, without aid from anything known when they were made, to construct an apparatus like the plaintiff's. They do not meet the requirement of law in regard to what is necessary, in a prior description and drawings, to defeat a subsequent patent. They are neither full nor clear nor exact."

#### IN THE

## UNITED STATES CIRCUIT COURT OF APPEALS

#### FOR THE SEVENTH CIRCUIT

No. 1154.

OCTOBER TERM, 1904.

APRIL SESSION, 1905.

NATIONAL PHONOGRAPH COMPANY, Appellant,

us.

LAMBERT COMPANY.

Appeal from the Circuit Court of the United States for the Northern District of Illinois.

Before Grosscup, Baker and Seaman, Circuit Judges.

Seaman, Circuit Judge, delivered the opinion.

The bill filed by the appellant, National Phonograph Company, for alleged infringement of Edison's patent No. 713,209, of November 11, 1902, for "process of duplicating phonograms," was dismissed, on final hearing, for want of equity, and this appeal is from the decree so entered. The patent in suit is one of a succession of patents issued to various patentees for methods and means for reproducing phonograph records—following the earlier inventions of Bell and Taintor and of Edison, for cylindrical phonograph Co. v. Lambert Co., 125 Fed. 922, 60 C. C. A. 632. If patentable invention appears, in the light of the prior patents, we are satisfied that it is narrow in scope and not entitled to the broad interpretation of the claims for which the appellant contends upon the issues of infringement.) We concur, however, in the conclu-

1154 2

sion of the trial court that the defense of prior public use of the patent process is clearly established, so that consideration is unnecessary of the issues involving both the merits of the claims in suit and their invasion by the appellee; nor is comment needful on the general equities discussed in the briefs

and oral arguments.

While the course adopted by the inventor, in the early conception and use of the process, in delaying the application for patent and in respect of changes made in the claims during the long pendency in the Patent Office, is singular and complex, the fact of public use within the statutory inhibition (section 4886 R. S.; 3 U. S. Comp. St. sec. 4886) is free from complication and settled, beyond doubt, by the testimony of the inventor and his assistant. The objection now urged on behalf of the appellant to the competency of this evidence is untenable in any view. Not only was it introduced by the appellant as a part of the prima facie case in support of the bill, and thus not open to its objection, but the testimony is plainly admissible, as part of the interference record, (entering into the "file wrapper and contents" as certified) by way of declarations or admissions of the applicant in the course

of the proceedings to obtain his patent.

The substantial facts upon the issue of prior public use may be briefly summarized. In 1888 the process described in the patent was discovered by Mr. Edison, but no application for a patent was filed until about ten years thereafter, although three patents in the same art—one for a "process of duplicating phonograms" and two for "phonogram-blanks"were issued to him in May, 1888. On October 26, 1888, he filed a caveat in the Patent Office which clearly described the process. The application for a patent was filed March 5, 1898, and allowance was delayed, for one cause and another, until November 11, 1902, when the patent was issued. It was assigned to the appellant December 16, 1902. The testimony discloses no change made in the process after the conception of 1888; and Mr. Edison testified, in the interference proceeding, that "so far as the process is concerned, it is just the same now, in a broad sense that it was" in 1888; that the work upon it thereafter, "was directed only towards the improvement of small details to make it commercial" and "perfect"; and that "the duplicate copies made by this process" as early as 1891, "were perfect as far as quality was concerned." He further testifies, that Dr. Schulzberg was

3 1154

the first to "carry out the process under his direction", in October, 1888, and Charles Wurth, another assistant, entered "on working up the methods for commercial production of the duplicates," in the spring of 1889; and that "he has produced a great many matrices, and has produced a great many copies from the matrices by expansion, which have been used commercially." Mr. Wurth, in the same proceeding, produced a matrix of 1891, containing a phonographic record made under the process, and testified that he "made over a thousand of them, of which this is one"; also that he made different copies or duplicates during the interim between 1889 and 1898, to the number of "about six or seven thousand,

perhaps eight thousand, all by the same process."

Notwithstanding the evidence thus authenticated that the process was constantly "used commercially for duplicating phonograms," it is contended that the use was not commercial or public in the sense of the statute, but merely "experimentation necessary to perfect" the process. This contention is unsupported by testimony, and is without force in any view under the authorities. The practice described by these witnesses is both public and commercial use of the process, and plainly was not of the experimental character, "solely to test the qualities of the invention" (Egbert v. Lipman, 104 U.S. 333, 336) which is the well recognized exemption from the public use prohibited by the statute. While it is true that the testimony reiterates the fact that improvement was sought constantly by the assistants, who were conducting the operations and "duplicating phonograms", no actual change in the process, after the original conceptions described in the caveat, is pointed out; and, if the operations thus described by the witnesses were open to inference of experimental use at any stage, no evidence appears to ascertain the limits of such use, the need of tests, or the reasonableness of the time, either required or employed, in making them. As well stated in Walker on Patents, 3rd Ed. sec. 94, "Experimental use becomes public use when it extends further, either in time or in number of instances, than is reasonably required to test the invention." Public use, however, continuing more than nine years in commercial operations, must be presumed from the testimony, and such fact is neither controverted nor modified by other proof, so that it is immaterial whether experimental use occurred at any stage. The statute invalidates the patent if the invention described therein was in public use or on

sale earlier than two years before the application was filed. That use so established was public use, in violation of the statute, and not within the well defined meaning of experimental use for testing the invention, is well settled under the authorities. These citations are deemed sufficient: Worley v. Tobacco Co. 104 U. S. 340, 343; Smith & Griggs Mfg. Co. v. Sprague, 123 U. S. 249, 256; Eastman v. Mayor, etc. of City of New York, . . . . C. C. A. . . . . . . 134 Fed. 844, 851, and cases reviewed.

The decree of the Circuit Court, conforming to this view, is Affirmed.

A true Copy.

Teste:

Clerk of the United States Circuit Court of Appeals for the Seventh Circuit.